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BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL

Chairman

JIM IRVIN

Commissioner

MARC SPITZER

Commissioner

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IN THE MATTER OF INVESTIGATION)
 INTO QWEST CORPORATION'S)
 COMPLIANCE WITH CERTAIN)
 WHOLESALE PRICING REQUIREMENTS)
 FOR UNBUNDLED NETWORK)
 ELEMENTS AND RESALE DISCOUNTS)

Docket No. T-00000A-00-0194

AT&T RESPONSE TO QWEST
 BRIEF RELATING TO THE TNS-
 BASED REVISED RUN OF THE HAI
 MODEL

AT&T Communications of the Mountain States, Inc. and TCG Phoenix
 (collectively "AT&T") provide the following response to Qwest Corporation's Brief
 Relating to the TNS-Based Revised Run of the HAI Model ("Qwest Brief"). Qwest
 misrepresents the process that TNS used to process the 2000 customer location data that
 Qwest provided, as well as TNS' attempts to use as much of that data as possible. Qwest
 then attempts to use the deficiencies of its own data as an excuse to repeat its own
 proposed inflated cost estimate or, alternatively, to relitigate its objections to TNS and
 using TNS to process customer location data. The Commission should deny Qwest's
 request and establish a permanent loop rate of \$12.12 consistent with the latest HAI
 Model run.

I. INTRODUCTION

Qwest fundamentally misrepresents the process that TNS used to process Qwest's
 2000 customer location data. TNS processed that data *in the same manner* as TNS
 processed the 1997 data in the initial model run. TNS did not change the clustering
 algorithm. Wherever possible TNS used the same algorithms and techniques it used to

create the original dataset. The only differences were the result of using different data. In the original data, for example, target locations were developed by census block and surrogated uniformly on roads within that census block. Qwest data contained locations by wire center. TNS thus created surrogate locations on roads within the wire center, or zip code boundaries, if that additional information was known. TNS, however, made no changes to the clustering process (which uses both geocoded and surrogate data).

Qwest complains that “the TNS clusters are different from those used in the previous run of the model.” Qwest Brief at 1-2. To state the obvious, of course the clusters are different because TNS was using different data. More specifically, Qwest criticizes TNS for allegedly exceeding 1,800 lines per cluster and placing customers “on top of and at the locations and addresses of identifiable customers.” *Id.* at 2. TNS did not change the 1,800 line per cluster limit, nor did TNS overlap customers. Under the 1,800 line limit guideline,¹ if the business and residence lines in a cluster are greater than 1,800 (before any true up to actual line counts), a second cluster will be formed. In some cases, however, more than 1800 lines exist at a single location. A single location will not be split into separate clusters. The reason for the constraint is an equipment sizing issue. The HAI Model, however, calculates the investments by estimating costs for whatever lines are in that cluster when it is run through the model. If multiple serving area interfaces (“SAIs”) or digital loop carriers (“DLCs”) are required in a cluster, the model will include cost for them. AT&T reviewed the data in light of Qwest's critique and confirmed that the TNS algorithm is working properly. Viewed most charitably, Qwest's

¹ The 1,800 line per cluster limit is a guideline, not a hard-and-fast rule, particularly in more urban areas. Having 80 out of the total of 3,600 clusters include more than 1,800 lines is not significant and, as discussed below, does not affect the cost estimates.

complaints are a result of its failure to understand the process – which was identical to the process TNS used to create the original data – not due to any nonexistent changes that TNS made to that process.

Qwest also laments that costs decreased from the earlier model run, which conflicts with Qwest's view that more customers and more lines should result in higher costs. Qwest, however, asks the Commission to ignore not only how the HAI Model works but basic principles of the economies of scope and scale that are fundamental to the total element long run incremental ("TELRIC") analysis. As AT&T explained in its May 24, 2002 submission of the latest HAI Model run results, the costs decreased – as AT&T expected – largely because TNS did not need to rely as much on surrogate locations, which are spread throughout the wire center. AT&T's witness Douglas Denney also explained this concept in his testimony in the context of discussing results from the BellSouth cost model. More accurate customer locations logically result in lower costs per line.

TNS fully lived up to the Commission's requirements and expectations. The same, unfortunately, cannot be said about the 2000 customer location data that Qwest provided. Whatever reliability concerns arise regarding the accuracy of the latest HAI Model run are attributable to Qwest's deficient data, and TNS worked cooperatively with the parties to use as much of that data as possible – often with the result of inflating the cost estimates. Qwest ignores the deficiencies of its own data and now asks the Commission to abandon its prior decisions to use the TNS process and adopt Qwest's prior proposal or, alternatively, to permit Qwest to relitigate the TNS process. The Commission should flatly reject both of Qwest's proposals.

II. DISCUSSION

A. **The Results of the HAI Model Run Based on Qwest 2000 Customer Location Data Is as Accurate as That Data Allows.**

TNS did precisely what the Commission ordered. TNS created new clusters using the same clustering methodology TNS used in the initial HAI Model run. Qwest's claims to the contrary are long on hyperbole but short on specifics. Qwest contends that costs should increase with the addition of more lines and more customer locations, but the statistics on which Qwest relies actually support the opposite conclusion. The FCC Synthesis Model to which Qwest repeatedly refers does not use any actual customer location data but uses 100% surrogate locations. The initial HAI Model run used approximately 25% surrogate locations and estimated substantially shorter distribution distances and thus lower costs. In the latest HAI Model run, only 6% of the customer locations are surrogates and, not surprisingly, distribution distance estimates were once again shorter and the costs further declined. This trend is consistent in every state and in every proceeding – as the number of surrogate locations decreases, so do the costs.

Qwest further claims that “TNS itself expressed serious concerns about the accuracy of its processing of Qwest's 2000 customer location data.” Qwest Brief at 5. The correspondence from TNS that Qwest cites, however, does not reflect uncertainties regarding the cluster creation process, but uncertainties regarding Qwest's data. TNS pointed out that some of Qwest's records had negative line counts associated with them – which simply is not possible. TNS suggested these records be removed. Qwest was adamant that they be changed to reflect one line. In the interest of moving forward AT&T agreed. TNS also showed some examples that might reflect the fact that Qwest was double counting data. Again, the obvious solution would have been to remove this

data, but again Qwest wanted to maximize the number of locations being used by the model. Since these problems with Qwest data arose late in the process, AT&T agreed to leave them in the data set even though it would overstate cost.

The concerns that TNS expressed with its “patches” were with the reliability of the Qwest data that required such “patches” and that those “patches” *increase* the cost estimates. Far from supporting Qwest’s position, therefore, those concerns support AT&T’s position that the \$12.12 is still too high. As AT&T stated in its May 24, 2002 filing, however, AT&T is willing to accept that rate, even though it reflects service of more than the existing demand in Arizona. AT&T urges the Commission to reach this same conclusion.

B. TNS Followed the Same Methodology It Used Previously to Create the Customer Clusters.

Qwest makes several claims about TNS data processing that are patently false. Qwest first contends that TNS refused to include locations for about 6% of customers without verifiable addresses and “did not look at other customer information that would have required further surrogating of customers and thus failed to establish locations for those customers.” Qwest Brief at 5-6. This is absolutely untrue. As discussed above, TNS included locations (both geocoded and surrogate) for virtually every customer in the data Qwest provided. Out of 2,000,000 records that were submitted to TNS for processing, 35 records (those with no CLLI associated with them) were excluded – nowhere near the 6% Qwest alleges. This *de minimus* exclusion had no affect on the resulting cost estimates. Nor did TNS abandon efforts to include customer information and provide surrogate locations, as Qwest complains. In correspondence exchanged early in the process, TNS observed that there were a large number of customers in the Qwest

data that were not assigned to a wire center. TNS asked if these customers should be excluded, and Qwest said that they should not. Qwest subsequently provided additional information associating these customers with a wire center, and TNS used this additional information.

Qwest's further complaints are similarly inaccurate. TNS treated outliers in the Qwest data the same as TNS treated outliers in the original data. TNS also used both zip code and wire center boundaries to surrogate customers. In those cases where the zip codes and wire center boundaries did not match, TNS surrogated the customers at the wire center level, which is consistent with how other data was processed (*i.e.*, the cases in which locations fell outside the Qwest wire center boundaries). The 35 customers with no central office specific location discussed above were excluded because there was no basis on which TNS could include them anywhere. TNS, AT&T, and Qwest repeatedly discussed the deficiencies of Qwest's data and how to use the Qwest data. TNS made no unilateral determinations but incorporated adjustments that erred on the side of inclusion and overestimating the number and locations of the customers in Qwest's data.

C. TNS Has Admitted Only That Qwest's Data Is Unreliable.

Qwest not only unfairly and inaccurately characterizes TNS' efforts but also unsuccessfully attempts to use TNS' cooperation against it. TNS questioned the accuracy of Qwest's data. Indeed, the e-mail passage that Qwest quotes (Qwest Brief at 6-7) states directly that TNS' concerns are with Qwest's customer data, not the process TNS used to process that data. Qwest nevertheless complains that TNS never provided a list of outstanding questions as it said that it would. There nevertheless were numerous e-mails and telephone conversations between TNS, Qwest, and AT&T discussing Qwest's data,

including the e-mail Qwest cites, in which TNS identified problems with the Qwest data and provided the parties with an opportunity to propose solutions. For example, in an e-mail sent at 12:08 a.m. on May 22, TNS points out other questions regarding Qwest data and attached pictures to demonstrate some of the issues. Qwest responded to these issues on May 22 at 3:09 p.m. The solutions proposed by Qwest had the impact of overstating cost, but because the data had to be processed that night, AT&T agreed to Qwest's proposed changes.

Qwest does not need to speculate on how TNS resolved issues, because TNS largely incorporated the adjustments that Qwest proposed to remedy the deficiencies in its own data. Despite having its thumb firmly on the scales throughout this process, the loop cost decreased. Accordingly, Qwest now takes issue with that result, criticizing TNS for the deficiencies of Qwest's own data and for using the "patches" to fix those deficiencies that Qwest itself proposed. Any unreliability in the processed data provided by TNS is attributable to the poor quality of the data that Qwest provided. Qwest should not be permitted to provide faulty data and then use the poor quality of that data as an excuse to abandon the Commission's prior decisions or to give Qwest the opportunity to relitigate issues on which it did not prevail. Qwest has provided no basis pursuant to which the Commission should adopt Qwest's proposed loop rate or conduct any additional proceedings on these issues in a future phase of this docket.


III. CONCLUSION

AT&T, therefore, requests that the Commission deny Qwest's request to establish a loop rate of \$13.92 and further deny Qwest's request to establish another interim loop rate and relitigate TNS data processing in a future phase of this proceeding. Rather, the

Commission should establish a permanent loop rate of \$12.12 based on the latest run of the HAI Model incorporating Qwest's 2000 customer location data.

Respectfully submitted this 29th day of May 2002.

**AT&T COMMUNICATIONS
OF THE MOUNTAIN STATES, INC.,
AND TCG PHOENIX**

By: 
Richard S. Wolters
1875 Lawrence Street, Suite 1503
Denver, Colorado 80202
Telephone: (303) 298-6741

Gregory H. Hoffman
AT&T
795 Folsom St.
San Francisco, CA 94107-1243

CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of AT&T's Response to Qwest Brief Relating to the TNS-Based Revised Run of the HAI Model, regarding Docket No. T-00000A-00-0194, were hand delivered this 29th day of May, 2002, to:

Arizona Corporation Commission
Docket Control – Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

and that a copy of the foregoing was hand-delivered this 29th day of May, 2002 to the following:

Ernest Johnson
Director – Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Maureen Scott
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Lyn Farmer
Chief Hearing Officer
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Dwight D. Nodes, ALJ
Hearing Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Chairman William A. Mundell
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85012

Commissioner Jim Irvin
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85012

Commissioner Marc Spitzer
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85012

and that a copy of the foregoing was sent via United States Mail, postage prepaid, on the 29th day of May, 2002 to the following:

Timothy Berg
Fennemore Craig, P.C.
3003 North Central Ave.
Suite 2600
Phoenix, AZ 85012
Attorneys for Qwest

Janet Livengood
Z-TEL Communications, Inc.
601 South Harbour Island
Suite 220
Tampa, Florida 33602
Attorneys for Z-Tel Communications, Inc.

Steve Sager, Esq.
McLeod USA Telecommunications
Service, Inc.
215 South State Street, 10th Floor
Salt Lake City, Utah 84111
Attorneys for McLeod USA

Michael W. Patten
Roscoe Heyman & DeWulf
400 North 5th Street
Suite 1000
Phoenix, AZ 85004
Attorneys for Cox, e-spire, McLeod USA,
Teligent, Z-Tel, MGC Communications

Dennis Ahlers
Echelon Telecom, Inc.
730 Second Avenue South
Suite 1200
Minneapolis, MN 55402
Attorneys for Echelon Telecom, Inc.

Thomas F. Dixon
WorldCom, Inc.
707 17th Street
Suite 3900
Denver, CO 80202
Attorneys for WorldCom

Darren S. Weingard
Stephen H. Kukta
Sprint Communications Co.
1850 Gateway Drive
7th Floor
San Mateo, CA 94404-2647
Attorneys for Sprint

Steven J. Duffy
Ridge & Isaacson, P.C.
3101 North Central Avenue
Suite 1090
Phoenix, AZ 85012-2638
Attorneys for Sprint

Ray Heyman
Roshka Heyman & DeWulf
400 North 5th Street
Suite 1000
Phoenix, AZ 85004
Attorneys for Alltel Communications

Marti Allbright, Esq.
MPOWER Communications Corporation
5711 South Benton Circle
Littleton, CO 80123
Attorneys for MGC Communications

Thomas H. Campbell
Lewis & Roca LLP
40 N. Central Avenue
Phoenix, AZ 85004
Attorneys for Rhythms Links, Inc., Time Warner,
WorldCom, Echelon Telecom, Allegiance

John Connors
WorldCom, Inc.
Law and Public Policy
707 17th Street, Suite 3600
Denver, CO 80202
Attorney for WorldCom

Eric Heath
Sprint Communications
100 Spear Street
Suite 930
San Francisco, CA
Attorneys for Sprint

Megan Doberneck, Senior Counsel
Nancy Mirabella, Paralegal
Covad Communications Company
4250 Burton Drive
Santa Clara, CA 95054
Attorney for Covad

Penny Bewick
New Edge Networks
P.O. Box 5159
3000 Columbia House Blvd.
Vancouver, Washington 98668
Attorneys for New Edge

Michael B. Hazzard
Kelley Drye and Warren
1200 19th Street, NW
Washington, DC 20036
Attorneys for Z-Tel Communications

Andrea Harris
Allegiance Telecom
2101 Webster
Suite 1580
Oakland, CA 94612

Michael M. Grant
Gallagher and Kennedy
2575 E. Camelback Road
Phoenix, AZ 85016-9225
Attorneys for ELI, Covad, New Edge

Scott S. Wakefield
RUCO
2828 N. Central Avenue
Suite 1200
Phoenix, AZ 85004

Kevin Chapman
SBC Telecom, Inc.
300 Convent Street, Room 13-Q-40
San Antonio, TX 78205